

INSTALLATION AND OPERATION MANUAL



Pellet-Fired Fireplace Insert

Save These Instructions For Future Reference

P/N 775,229M, Rev. B, 08/2008



Pellet Insert Model Winslow™ (PI40)

A French manual is available upon request. Order P/N 775,229CF.

Ce manuel d'installation est disponible en français, simplement en faire la demande. Numéro de la pièce 775.229CF.

These appliances must be properly installed and operated in order to prevent the possibility of a house fire. Please read this entire manual before installation and use of this pellet fuel-burning room heater. Failure to follow these instructions could result in property damage, bodily injury or even death. Contact your local building or fire officials to obtain a permit and information on any installation requirements and inspection requirements in your area.



Report No. 050-S-14b-2



www.nficertified.org

We recommend that our pellet hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Pellet Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).





A WARNINGS

 Hot! Do not touch! The glass and surfaces of this appliance will be hot during operation and will retain heat for a while after shutting off the appliance. Severe burns may result.



- Carefully supervise children in the same room as appliance.
- Lennox[™] pellet-burning appliances are designed for use as a supplemental heater. They are not intended for continuous use as a primary heat source.

IMPORTANT SAFETY AND WARNING INFORMATION

READ THIS MANUAL IN ITS ENTIRETY AND <u>UNDER-</u> STAND THESE RULES TO FOLLOW FOR SAFETY.

A WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

WARNING

Do not attempt to alter or modify the construction of the appliance or its components. Any modification or alteration may void the warranty, certification and listings of this unit.

- 1. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.
- 2. Do not connect this appliance to air ducts or any air distribution system.
- 3. DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.
- 4. Do not use class B venting intended for gas appliances as a chimney or connector pipe on a pellet-fired appliance.
- 5. The minimum clearances must be maintained for all combustible surfaces and materials including; furniture, carpet, drapes, clothing, wood, papers, etc. <u>Do not store combustibles</u> within this clearance space (see *Clearances* on *Page 7*).
- 6. INSTALLATION DISCLAIMER It is imperative that the exhaust venting system be installed correctly and sealed gas-tight (not allowing exhaust to leak). Follow the vent manufacturer's instructions for proper installation. Since Lennox Hearth Products has no control over the installation of your fire-place insert, Lennox Hearth Products grants no warranty, implied or stated for the installation or maintenance of your insert, and assumes no responsibility for any consequential damage(s).
- Burning any kind of fuel consumes oxygen. If outside air is not ducted to the appliance, ensure that there is an adequate source of fresh air available to the room where the appliance is installed.
- 8. The appliance will not operate using natural draft, nor without a power source for the blower and fuel feeding systems.
- Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in this heater. Keep all such liquids well away from the heater while it is in use.
- 10. The authority having jurisdiction such as municipal building department, fire department, fire prevention bureau, etc should be consulted before installation to determine the need to obtain a permit.

- 10.APPROVED FUEL: This appliance is designed specifically for use only with pelletized wood fuels only. This appliance is designed and approved for the burning of wood residue pellets with up to 3% ash content. This appliance is NOT approved to burn cardboard, nut hulls, cherry pits, corn, etc. regardless if it is in pellet form. Failure to comply with this restriction will void all warranties and the safety listing of the fireplace insert. Consult with your Lennox Hearth Products dealer for more information on approved pellet fuels.
- 11.These appliances are designed as supplemental heaters. Therefore, it is advisable to have an alternate heat source when installed in a dwelling.
- 12.CONTINUOUS OPERATION: When operated correctly, this appliance cannot be overfired. Continuous operation at a maximum burn can, however, shorten the life of the electrical components (blowers, motors, and electronic controls), and is not recommended. Typical approved operation would include running at the low to mid range setting with occasional running on the maximum setting during the coldest periods of the winter. DO NOT OVER-FIRE THIS INSERT. Follow all instructions regarding the proper use of this insert.
- 13.CAUTION: NEVER PUT FINGERS NEAR AUGER. Pellet fuel is fed to the UltraGrate™ by a screw auger. This auger is driven by a high torque motor. The auger is capable of doing serious harm to fingers. Keep pellets in the hopper at all times and keep fingers away from auger. The auger can start and stop automatically at any time while the insert is running.
- 14. CAUTION: NEVER PUT FINGERS NEAR AUGER. Pellet fuel is fed to the UltraGrate™ by a screw auger. This auger is driven by a high torque motor. The auger is capable of doing serious harm to fingers. Keep pellets in the hopper at all times and keep fingers away from auger. The auger can start and stop automatically at any time while the insert is running.
- 15.FLY ASH BUILD-UP: For all wood pellet fuel-burning heaters, the combustion gases will contain small particles of fly-ash. This will vary due to the ash content of the fuel being burned. Over time, the fly-ash will collect in the exhaust venting system and restrict the flow of the flue gases. The exhaust venting system should be inspected regularly and cleaned as necessary.
- 16.SOOT FORMATION: Incomplete combustion, such as occurs during startup, shutdown, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. A precautionary inspection on a regular basis is advisable to determine the necessity of cleaning. The exhaust venting system should be inspected regularly and cleaned as necessary.
- 17.DISPOSING OF ASHES: Any ashes removed from the pellet fireplace insert must be deposited in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, outside of the dwelling pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.
- 19. The instructions must be strictly adhered to. Do not use makeshift methods or compromise in the installation.
- 20.Do not abuse the door glass by striking, slamming or similar trauma. Do not operate the insert with the glass removed, cracked or broken.
- **18.SAVE THESE INSTRUCTIONS.**
- 19. See the listing label on the appliance.

CONGRATULATIONS!

When you purchased your new pellet stove, you joined the ranks of thousands of individuals whose answer to their home heating needs, aesthetics, efficiency and our environment. We extend our continued support to help you achieve the maximum benefit and enjoyment available from your new pellet stove.

It is our goal at Lennox Hearth Products to provide you, our valued customer, with an appliance that will ensure you years of trouble free warmth and pleasure.

Thank you for selecting a Lennox Hearth Products stove as the answer to your home supplemental heating needs.

TABLE OF CONTENTS

Important Safety Warnings	Page 2
Using this Manual	Page 3
Planning Your Installation	Page 4
Selecting a Location	Page 4
Features and Specifications	Page 5
Insert Dimensions	Page 6
Minimum Fireplace Size	Page 6
Clearances to Combustibles	Page 7
Hearth Protection	Page 7
Installation	Page 8-17
Control Board Installation	Page 8
Venting	Page 8
Vent Termination Requirements	Page 8
Vent Termination Locations	Page 9
Insert Leveling	Page 10
Surround Installation	Page 10
Mobile Home Installations	Page 11
Outside Air Installations	Page 12
Thermostat installation	Page 12
Door Trim Installation Instructions	Page 12
Door Grill Installation Instructions	Page 14
Brick Panel Installation Instructions	Page 15
Log Set Installation Instructions	Page 17
Operation	Page 14-19
Control Board	Page 18
Filling the Hopper	Page 18
Lighting	Page 18
Manual Operation	Page 18
Thermostat Operation	Page 18
Shut Down	Page 19
Paint Curing	Page 19
Convection Blower Operation	Page 19
Operating Sounds	Page 19

Pellet Fuel	Page 19
Corn Fuel	Page 19
Cautions	Page 19
Cleaning and Maintenance	Page 20-23
Burn Pot Cleaning	Page 20
Cleaning Glass	Page 20
Cleaning Heat Exchanger	Page 20
Cleaning Flue Gas Passageways	Page 20
Cleaning Combustion Blower	Page 21
Cleaning Vent Pipe	Page 21
Removing Ash from the Firebox	Page 21
Cleaning Convection Blower	Page 22
Adjustable Hopper	Page 22
Cleaning "Proof of Fire" Switch	Page 22
Front Door Opening and Removal	Page.23
Side Door Removal	Page.23
Component Location and Functions	Page.24-25
Igniter	Page.24
Vacuum Switch	Page.24
Auger and Auger Motor	Page.24
Over Temperature Snap Switch	Page.24
Proof of Fire Snap Switch	Page.24
Convection Blower Snap Switch	Page.24
Draft Adjuster	Page.25
Wiring Diagram	Page.25
Diagnostic Codes	Page.26
Troubleshooting	Page.26
Replacement Parts	Page.27
Accessories	Page.28
Heat Kit Instructions	Page 29
Pellet Insert ZC Kit Assembly Instructions	Page 30
ZC Framing Dimensions for	
Combustible Hearth /Floor	Page 33
ZC Framing Dimensions for Non-	
Combustible Hearth /Floor	Page 34
Product Reference Information	Page.36

USING THIS MANUAL

Please read and carefully follow all of the instructions found in this manual. Please pay special attention to the safety instructions provided in this manual.

PRODUCT IS SUBJECT TO CHANGE WITHOUT NOTICE

PLANNING YOUR INSTALLATION

Questions To Ask Local Building Official

A correct installation is critical and imperative for reducing fire hazards and perilous conditions that can arise when wood pellet burning appliances are improperly installed. The installer must follow all of the manufacturers' instructions.

A WARNING

Check all local building and safety codes before installation. The installation instructions and appropriate code requirements must be followed exactly and without compromise. Alterations to the stove are not allowed. Do not connect the stove to a chimney system serving another stove, appliance, or any air distribution duct. Failure to follow these instructions will void the manufacturers warranty.

The installation of this appliance must conform to local codes and applicable state and federal requirements. Familiarity with these requirements before installation is essential. Important considerations to discuss with local building officials include:

 Applicable codes (i.e. Uniform Mechanical Code, State or Regional Codes).

Electrical codes:

In USA, NEC, ANSI/NFPA 70 – Latest Edition In Canada, CSA C22.1 – Latest Edition

Power Supply Requirements

The power cord must be plugged into a standard, 120 volt, 60 Hz grounded electrical outlet. The power supply cord must be routed to avoid contact with any of the hot or sharp exterior surface areas of the stove. When installed in a manufactured home, the appliance must be electrically grounded to the steel chassis (see *Mobile Home Installations* on *Page* 11, for additional requirements). These requirements must be met unless otherwise specified by state or local authorities.

Electrical

- · The fireplace insert requires 120 volts AC for operation.
- Maximum wattage is 700.
- Igniter wattage is 400.
- Normal operating wattage is 300.

Electrical Generator Operation

Your Winslow™ PI40 insert can be powered with a gas driven electrical gererator. However, the generator's electrical regulator may not be compatible with the insert's electronics. The higher the quality of the gererator, the greater the chance that it is compatible with the insert.

WARNING

Electrical grounding instructions: This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug. Do not route power cord under or in front of appliance.

- 2. Local amendments
- 3. Is a permit required cost. You may wish to contact your insurance company to ask if they require this.
- 4. If outside combustion air is required
- 5. Rooms where the installation is not allowed

Surge Protectors - A surge protector is recommended to ensure the stove's electrical components are not damaged due to a surge in the electrical supply. Only high quality protectors should be used - cheap ones do not provide the protection needed.

Smoke Detectors - Since there are always several potential sources of fire in any home, we recommend installing smoke detectors. If possible, install the smoke detector in a hallway adjacent to the room (to reduce the possibility of occasional false activation from the heat produced by these appliances). If your local code requires a smoke detector be installed within the same room, you must follow the requirements of your local code. Check with your local building department for requirements in your area.

Installation / Maintenance Standards - National Fire Protection Association – The primary NFPA standard that refers to installation and maintenance of pellet appliances and venting is NFPA 211 – Latest Edition: Chimneys, Fireplaces, Vents, and Solid Fuel appliances.

SELECTING A LOCATION

The design of your home and where you place your stove will determine its value as a source of heat. This type of appliance depends primarily on air circulation (convection) to disperse its heat, and therefore, a central location is often best. There are other practical considerations, which must be considered before a final selection of locations is made.

- · Existing Chimneys
- Pellet Fuel Storage
- · Aesthetic Considerations
- Roof Design (rafter locations & roof pitch)
- Room Traffic
- Proximity to Combustibles
- Electrical Wiring

A CAUTION

The body of these appliances are very heavy. The use of a heavy duty escalara (stair step hand truck) is recommended for lifting the appliance body.

NEGATIVE PRESSURE WARNING

This appliance is not designed to be operated in a negative pressure. Very airtight homes with large kitchen exhaust fans, or homes with furnace cold air returns located in close proximity to the stove may create negative pressure in the same room as the heating appliance. This can create dangerous condition, drawing combustion by-products into the home. Be sure your home has adequate makeup air to eliminate negative pressures caused by the above-mentioned sources. Outside air connected to the appliance probably will not resolve such a problem as the stove is not the source of negative pressure. Lennox Hearth Products accepts no liability for damages resulting from negative pressures described here.

Ventilation Requirements - Provide adequate air for combustion. The fresh air requirements of this appliance must be met within the space where it will be installed. Ventilation is essential when using a solid-fuel-burning heater. In well insulated and weather tight homes, it may inhibit the rate the exhaust flows through the venting system (caused by a shortage of air in the home). The lack of air is caused by many common household appliances which exhaust air from the home (such as a furnace, heat pump, air conditioner, clothes dryer, exhaust fans, fireplaces, and other fuel burning appliances). Also, the combustion process of this heater uses oxygen from inside the dwelling. If the available fresh air delivery in the dwelling is insufficient to support the demands of these appliances, problems can result (i.e. excessive negative pressure will result in performance problems. To correct this problem it may help to open a window (preferably on the windward side of the house) or install an outside combustion air duct to the appliance.

FEATURES AND SPECIFICATIONS

Installation Options

- Residential
- · Vented vertical and horizontal (see venting instructions)
- · Manufactured home and mobile home
- Thermostat or manual operation
- Bedrooms

Heating

- Max. feed rate is 4.5 pounds/hour or 37,500 BTU/hour
- Min. feed rate is 1.8 pounds/hour or 15,120 BTU/hour

Venting

This appliance is approved for venting with Type L and Type PL pellet vent pipe. The flue collar on the fireplace insert accepts 3" diameter pipe. The vent pipe can be installed vertically or horizontally (see Venting section for recommended installations).

The combustion air for this fireplace insert is drawn through a pipe at the lower rear of the fireplace insert. For mobile home installations a 2" ID flex line or pipe can be attached to the fireplace insert's air intake to draw air from outside the house.

Thermostat

This fireplace insert can be operated manually or with a thermostat.

Lighting

This fireplace insert is equipped with an electric self ignitor for ease of ignition.

Fuel Specifications

This insert is designed to burn wood pellet fuel. In addition, a corn/wood pellet mixture, with a maximum of 50 percent corn can be burned. Burning any other fuel that is not approved for use with this appliance will void the appliance warranty. IMPORTANT: The corn/wood mix needs to be mixed evenly before being put in the Winslow™ pellet insert hopper.

Wood Pellet Specifications: This appliance has been designed to burn wood residue pellets with up to 3% ash content. Dirty fuel will adversely affect the performance of the insert. Any questions regarding pellet fuel can be answered at the Pellet Fuels Institute (PFI), www.pelletheat.org.

A CAUTION

THE USE OF UNAPPROVED, DIRTY, WET AND/OR HIGH SALT CONTENT FUEL WILL VOID THE WAR-RANTY!

Wood pellets manufactured to the pellet fuels institute (P.F.I.) certification standard are available in two grades, Standard and Premium. The primary difference between the two is the ash content of the pellets.

The P.F.I. specification for standard grade and premium grade residential pellet fuel is as follows:

- CHLORIDES (Salt): Less than 300 p.p.m. to avoid insert and vent rusting
- BULK DENSITY: 40 lb. / Cu. Ft. minimum
- MOISTURE CONTENT: 8% maximum
- ASH CONTENT: < 3% maximum (standard grade) < 1% maximum (premium grade)
- FINES: 0.5% maximum through a 1/8" screen

BTU CONTENT: There are a number of variations in pellet fuels that are
not included in PFI standards. For example, BTU (heat value) content
may range from just under 8,000 to almost 9,000 Btu, depending
upon species and region of the country and other variables.

Corn Specifications: Use only clean-shelled corn with a moisture content less than 15% and approximate fuel value of 7000 BTU/lb (16,200 kJ/kg). Do not attempt to burn corn with higher moisture content or burn lesser grade fuels. Do not burn other types of agricultural pellets or by-products (alfalfa, cherry pits, olive pits, nut shells, etc.) as they are not permitted to be burned in these appliances.

Weight - 270 pounds

Hopper Capacity

55 pounds (adjustable down to 40 pounds to fit into small fireplaces)

Listing Information

The Winslow™ PI40 insert is safety listed with the following agencies:

- OMNI-Test Laboratories, Inc., Portland Oregon to ASTM E 1509
- · US EPA List of Exempt Wood Heating Appliances
- Colorado Approved Pellet Stoves

Appearance Options

The Winslow PI40 insert can be ordered with the following door trims, grills, surround (flange) assemblies, log set and brick panel options:

Door Trim Kits		Grill Kits	
Black	79038	Black	79000
Gold	79034	Gold	79001
Nickel	79037	Nickel	79002
Brush Nickel	79035	Brush Nickel	79022
Black Nickel	79036	Black Nickel	79039
Surround Kits	Disab Take	70004	

29" Ht. x 41" Wd.	Black Trim	79004
29" Ht. x 48" Wd.	Black Trim	79005
33" Ht. x 41" Wd.	Black Trim	79006
33" Ht. x 48" Wd.	Black Trim	79007

32" ZC Surround Kit *

29" Ht. x 41" Wd. x 3" Deep 79032

Surround Trim Kits

Ouriouna mini kito	
Trim/Black 29" Ht. x 41" Wd.	H5143
Trim/Black 29" Ht. x 48" Wd.	H5145
Trim/Black 33" Ht. x 41" Wd.	H5144
Trim/Black 33" Ht. x 48" Wd.	H5146
Trim/Gold 29" Ht. x 41" Wd.	75036
Trim/Gold 29" Ht. x 48" Wd.	75038
Trim/Gold 33" Ht. x 41" Wd.	75040
Trim/Gold 33" Ht. x 48" Wd.	75042
Trim/Nickel 29" Ht. x 41" Wd.	75037
Trim/Nickel 29" Ht. x 48" Wd.	75039
Trim/Nickel 33" Ht. x 41" Wd.	75041
Trim/Nickel 33" Ht. x 48" Wd.	75043
Log Set	H5142
Brick Panel Kit - Required	79030

^{*} This black surround kit positions the insert 3" forward so that it will allow the insert to fit into a fireplace with a narrower width in the front (32" min.). *Note: No trim kits are available for this kit at this time.*

INSERT DIMENSIONS

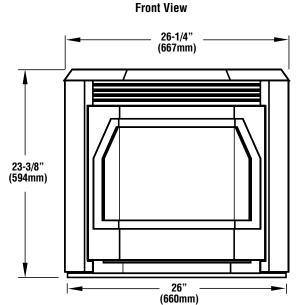
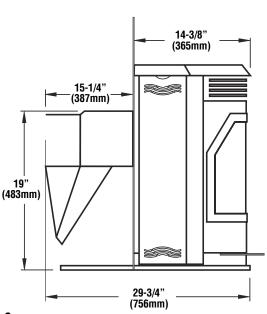


Figure 1



Side View

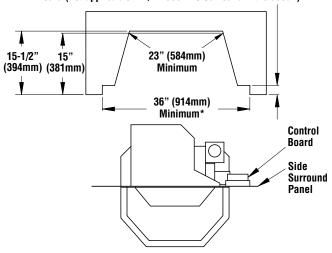
Figure 2

MINIMUM FIREPLACE SIZE

Figures 3 and 5 shows the minimum sized fireplace required for the Winslow™ PI40 insert when any of the four non-extended surround sizes are used.

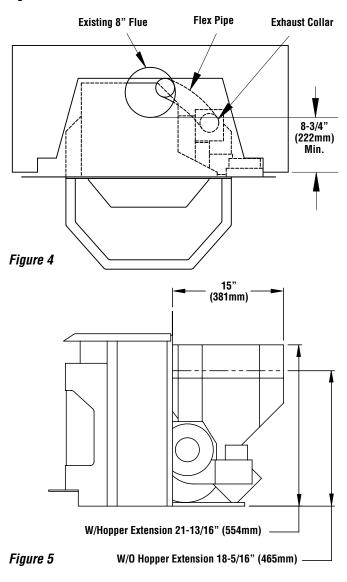
With the hopper at its largest size (as shipped from the factory), the fireplace needs to be a minimum of 22-1/2" (572 mm) high. When the hopper is adjusted to its smallest size (see "Adjustable Hopper"), the fireplace needs to be a minimum of 19" (483 mm) high.

2-1/2" Minimum Screen Pocket is Needed for the Control Board (not applicable if P/N 79032 ZC Surround Kit is used*)



This fireplace insert can fit into a fireplace with a narrower width in the front (32" min. instead of 36" min.) when the 3" Deep ZC Surround Kit is used (P/N 79032). See Figure 11C on Page 11 for more information. Please take note that because the appliance will be positioned in a more forward position on the existing hearth, additional floor protection may need to be added to the front of the appliance (see Figure 7).

Figure 3



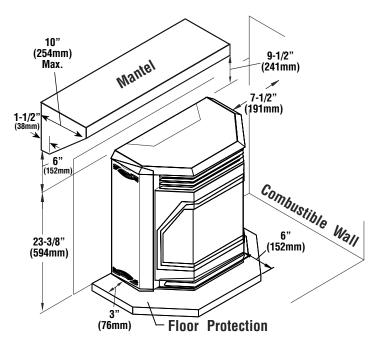
CLEARANCES TO COMBUSTIBLES

A IMPORTANT

- Minimum clearances specified may not allow for ease of operation and maintenance (please take this in to account when planning the installation).
- Recommended clearance zone from the front of the appliance to combustibles is 4 feet minimum.
- Clearances to combustibles for the appliance can only be reduced by means approved by the regulatory authority.

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.

Important: The control board attaches to the back of the right side surround panel. Therefore, the width of the fireplace firebox needs to be 36" (914 mm) wide at the front if the insert with control board is to slide into the firebox. Extended surround panels are available to accommodate narrower fireboxes.



Fiaure 6

HEARTH PROTECTION

The floor protector must be a non-combustible material extending beneath the insert from the surround panels forward and to the front and sides as shown in *Figure 7*. Important, if anything other than a masonry hearth is used in the installation you must use the Heat Kit (Cat. No. 79024).

Hearth Protection (shaded gray)

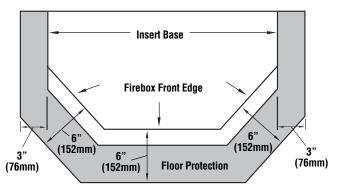


Figure 7

Minimum Size Floor Protection

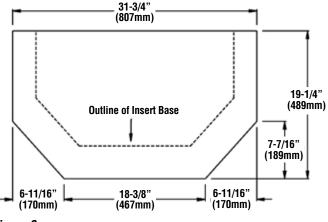


Figure 8

Zero Clearance Kit and Heat Kit Installation

The Winslow™ PI40 insert has a Zero Clearance Kit (Cat. No. 79025) and a Heat Kit (Cat. No. 79024) approved for new construction or remodel installations. See Zero Clearance and Heat kit installation instructions at the back of this manual for requirements. Both kits have been tested and approved through OMNI Testing Laboratories Inc.

INSTALLATION

Control Board Installation

The Winslow PI40 insert is shipped with the control board wrapped and placed behind the firebox. To install the control board, unwrap it and the right side surround panel found in the surround kit. There are four prongs protruding from the surround. Place the two slots in the bottom and the two holes in the top of the control board over the four prongs on the surround panel. Install the surround panels following the instructions on *Page 10*.

Venting

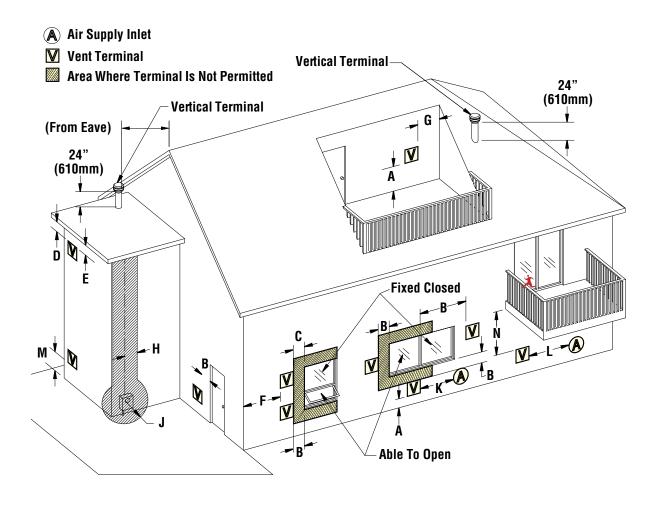
Pellet pipe type PL, L, or listed pellet flex liner must be used to vent the Winslow™ PI40 insert. The insert's flue collar is 3" in diameter. The insert's combustion blower pressurizes and pushes flue gases out the pellet pipe. All pipe joints should be locked together or screwed with three screws if the pipe does not have a locking system. The pipe joints can be sealed with high temperature silicone if there is a possibility of flue gases leaking into the living area. The pipe should be fastened with three screws to the insert's flue collar. The longer the run of pipe and the more elbows used, the greater the resistance to the flow of flue gases. Four inch diameter pellet pipe is recommended for pipe runs greater than 15 feet or when a number of elbows are used. A 3-4" increaser can be used to connect the 4" pipe to the 3" flue collar. The outside air pipe may run up the chimney, horizontally, or down provided the structural integrity of the fireplace and chimney system are maintained. DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

Vent Termination Requirements:

If the insert is not vented vertically, the following apply:

- Do not terminate the vent in any enclosed or semi-enclosed areas such as a carport, garage, attic, crawlspace, narrow walkway, closely fenced area, under a sundeck or porch, or any location that can build up a concentration of fumes such as stairwells, covered breezeway, etc.
- Vent surfaces can become hot enough to cause burns if touched. Non-combustible shielding or guards may be required.
- 3. Termination must exhaust above the inlet elevation. It is recommended that at least five feet of vertical pipe be installed outside when the insert is vented directly through a wall. This will create a natural draft to prevent the possibility of smoke or odor during appliance shut down or power failure and avoid exposing people or shrubs to high temperatures.
- 4. The vent should terminate no less than four feet below, no less than four feet horizontally from, and no less than one foot above doors and windows, or gravity/ventilation air inlets into the building.
- 5. The distance between the bottom of termination and grade should be 12" minimum. The distance between the bottom of the termination and a public walkway should be a minimum of seven feet.
- Locate the vent termination at least two feet away from combustible materials such as shrubs, plants, grass, fences, roof overhangs, and adjacent buildings.

Vent Termination Locations



- A = Clearance above grade, veranda, porch, deck, or balcony (min. 12"/30cm)
- B = Clearance to window or door that may be opened (min. 12"/30cm above 48"/1.2m below and to the side)
- C = Clearance to permanently closed window *(min. 12"/30cm)
- D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of *(min. 24"/60cm) from the center-line of the terminal (min. 22"/55cm) check with local code.
- E = Clearance to unventilated soffit *(min. 12"/30cm)
- F = Clearance to outside corner *(min. 12"/30cm)
- G = Clearance to inside corner *(min. 12"/30cm)
- H = Not to be installed above a meter/regulator assembly within *(min. 36"/90cm) horizontally from the centerline of the regulator.
- J = Clearance to service regulator vent outlet *(min. 72"/1.8m)
- K = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance *(min. 48"/1.2m)

- L = Clearance to a mechanical air supply inlet *(min. 120"/3.1m)
- M = **Clearance above paved sidewalk or a paved driveway located on public property *(min. 84"/2.1m)
- N = ***Clearance under veranda, porch, deck, or balcony (min. 12"/30cm)

Note:

- Local codes or regulations may require different clearances.
- ** A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- *** Only permitted if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

Figure 9

The recommended pipe installation is running the pellet pipe from the insert all the way to the top of the chimney. However, the pipe may terminate inside the chimney above the damper if the chimney is sealed below the pellet pipe termination with a block off panel (see *Figure 10*). The insert can also be vented horizontally out the back of the fireplace, but a listed pellet pipe thimble must be used if the pipe goes through a combustible wall and the structural integrity of the fireplace and chimney system must be maintained.

Insert Leveling

Inside the firebox is a bag of hardware with four 4"x 3/8" carriage bolts. If the insert needs to be leveled, install one of these bolts (from the bottom side) in the nuts at the left and right rear of the base of the insert. Open the front door and remove the bolts screwed into the nuts at the left and right front of the firebox floor.

From the bottom outside of the insert, install the remaining two carriage bolts in the nuts from which the bolts were just removed. A zero clearance front support is available to fill the space between the insert and hearth.

Surround (Flange) Installation

To install the surround panels:

- Remove the side doors (see *Page 23*) to access the surround mounting brackets. Remove the speed nuts from the parts bag found in the firebox. Install the six speed nuts (with the flat surface forward) on the six surround mounting bracket holes, three on each side of the insert. A flat-bladed screwdriver may help in installing the nuts. See the expanded view in *Figure* 11A.
- 2. Screw the six 1/4" truss head screws partially into the speed nuts (see A in *Figure 11A*).
- 3. The side surround panel with the small access door for the control board goes on the right side of the insert (see *Figures 11B and 11C*). Slide the slots in the side surround panels and top surround panels behind the heads of the truss screws. Tighten all six truss screws after shifting surround panels to eliminate space between the side and top surround panels.
- 4. Install two spring clips approximately five inches from each end of each of the three trim pieces. The spring clips should be installed in the channel of the trim with the curved portion of the clip to the front toward the rounded surface of the trim.
- 5. Place the longest trim piece with the rounded surface out along the edge of the top surround panel with the spring clips slightly behind the surround panel. Pull the trim forward, compressing the spring clips, and slide the trim down onto the surround.
- 6. Insert the elbowed retainer in the mitred end of the side trim pieces and fasten with flat screwdriver. Insert the other end of the retainer in the end of the already installed top surround trim and slide side trim onto the edge of the side surround compressing the spring clips in the process. Repeat the same steps for the other side trim. Fasten the elbowed retainer securely in the top surround making a nice mitred corner.

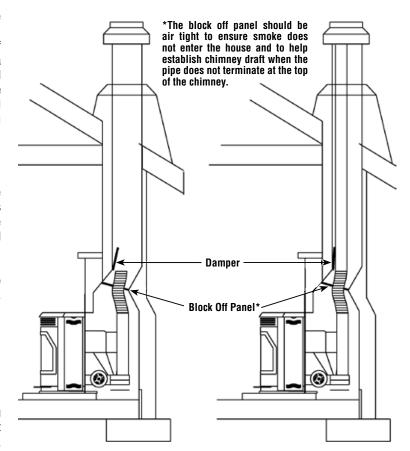


Figure 10

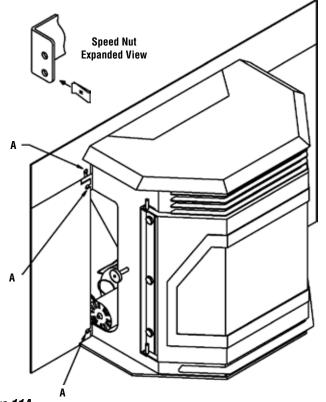


Figure 11A

Fireplace Installation Using Standard Surround Kits (P/N 79004, 79005, 79006 and 79007)

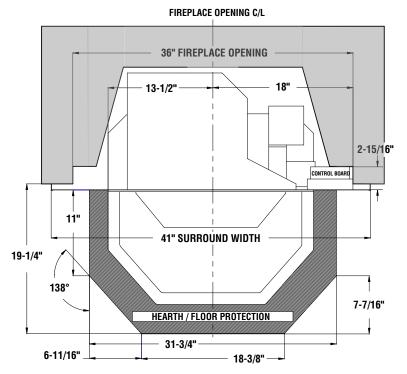
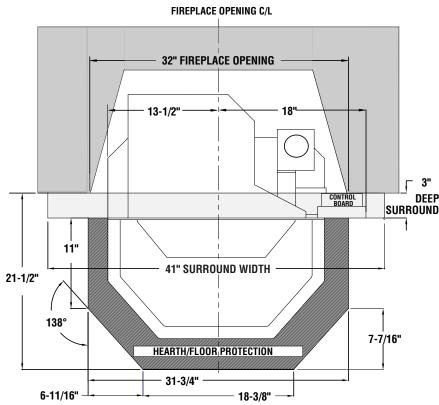


Figure 11B

Fireplace Installation Using 3 Inch Deep ZC Surround Kit (P/N 79032 *)



* This black surround kit positions the insert 3" forward so that it will allow the insert to fit into a fireplace with a narrower width in the front (32" min.). Note: No trim kits are available for this kit at this time. See instruction sheet P/N 506033-05 for more information.

Mobile Home Installations

The following steps are required for installation of the Winslow™ PI40 insert in mobile homes. See *Figure 12*.

- Connecting the Winslow PI40 insert to outside combustion air is optional, except in mobile home installations and when required by local building codes. The insert's air intake will accept 2" ID pipe to accommodate outside air installations. The air intake on the exterior of the home should always be located substantially below the flue termination and terminate with a cover to keep out weather and pests.
- The insert must be fastened to the hearth/floor using lag screws. The screws can be inserted through the holes in the base located behind the side doors. If the hearth is concrete or masonry, use proper lag bolts and methods designed for anchoring to masonry or concrete.
- The insert must be grounded with a #8 or larger copper wire

WARNING: DO NOT INSTALL THIS INSERT IN A SLEEP-ING ROOM IN A MANUFACTURED HOME.

CAUTION: THE STRUCTURAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.

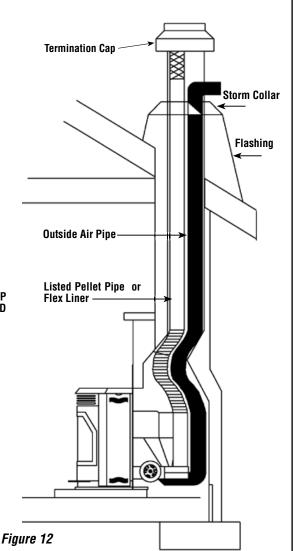


Figure 11C

Outside Air Installations

Connecting the Winslow PI40 insert to outside combustion air is optional, except in mobile home installations and when required by local building codes. The fireplace insert's air intake will accept 2" ID pipe to accommodate outside air installations. The air intake on the exterior of the home should always be located substantially below the flue termination and terminate with a cover to keep out weather and pests. The outside air pipe may run up the chimney, horizontally, or down provided the structural integrity of the fireplace and chimney system are maintained.

Thermostat installation

The Winslow PI40 insert can be operated manually or by thermostat. The insert comes from the factory wired to operate manually, see control board operation on **Page 18**. A low voltage thermostat can be installed on the insert. To install the thermostat:

- Unplug the insert from the electrical outlet. Open the right side door and lift out the control board from its retaining brackets. Locate the light green wiring block at the bottom back of the board (see *Figure* 13), loosen the two screws B at the back of the block, and remove the U shaped jumper wire A protruding from the block.
- Insert a wire from the thermostat into one of the slots from which the jumper wire was removed. Repeat this process for the other thermostat wire.

Retain the jumper wire for future reinstallation. See *Page 18* for thermostat operation instructions.

IMPORTANT NOTE: Install the thermostat per the manufacturers instructions, provided with the thermostat. Failure to follow manufacturers instructions could result in a malfunction. Pay special attention to the thermostat location requirements. If the location requirements are not adhered to the appliance, erratic operation or failure may occur.

Do not mount the thermostat where it may be affected by:

- Radiant heat from the insert, fireplaces, sun or other heat sources
- · Drafts or dead spots behind doors or in corners.
- · Hot or cold air from ducts.

Rear View of Control Board

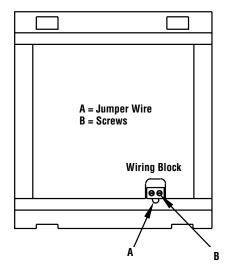


Figure 13

Door Trim Installation Instructions

Parts List (A)

Qty

- (2) Trim Pieces (Gold, Nickel, Brushed Nickel or Black Nickel)
- (6) #10 nuts
- (6) #10 washers

Tools Needed

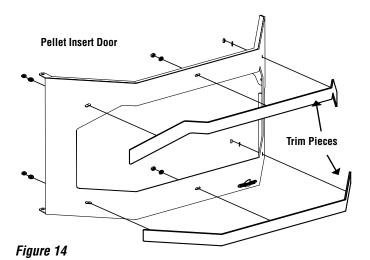
Qty

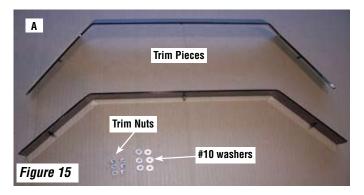
(1) 3/8" nut driver or socket wrench

CAUTION: Always ensure that plated surfaces are clean and free of fingerprints before lighting the insert. Fingerprints will leave permanent blemishes if left on plated surface when lit. When installation is complete, the trim should be gently cleaned with soft cloth and either alcohol or glass cleaner. Do not overtighten nuts, overtightening can create visible dimples on the plated surface.

To Install Door Trim:

- 1. Remove the trim pieces and hardware from its packaging and ensure that all pieces are present before beginning installation. Take care not to scratch finished surfaces.
- Open right and left side door. The side doors swivel open towards the back of the insert. See Figure 16.
- 3. Open front door. Put trim in place by inserting trim studs into the corresponding holes in the door *(Figures 14 and 15)*. The top piece of trim will only fit in one direction, but the bottom piece can be installed incorrectly. When placing the bottom piece of trim, make sure there is a 9/16" gap between the top of the trim piece and the glass in the door. See *Figure 18*.





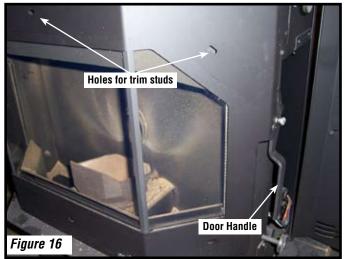




Figure 17



- 4. Place one washer on each stud. Using a 3/8" nut driver, snug up the nuts on each piece of trim. Do not finish tightening the nuts yet. See *Figure 19*.
- 5. There should be approximately a 7/8" (22 mm) gap between the top edge of the upper trim and the top edge of the door and a 1-1/2" (38 mm) gap between the bottom trim to the bottom of the door. Visually inspect the alignment of the trim and adjust if necessary. See *Figure* 20.
- 6. Finish tightening nuts. CAUTION DO NOT OVER-TIGHTEN NUTS, DIMPLING OF THE TRIM WILL OCCUR!!!



Figure 19



Figure 20

Door Grill Installation Instructions

Parts Needed

Qty

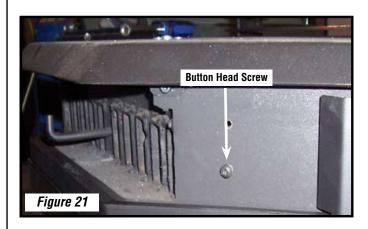
(4) Button Head Screws (already in place in insert)

Tools Required:

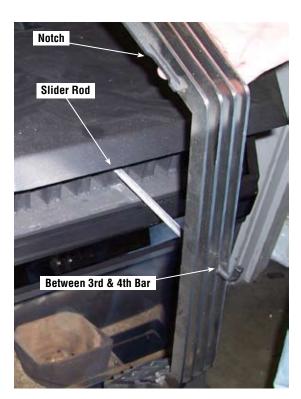
1/8" allen wrench

To install the Grill:

1. Remove the four button head screws from body of the insert with a 1/8" allen wrench. See *Figure 21*.



2. Pull the scraper rod out, rotate the grill vertically, (with the notch to the left) and slide the grill over the scraper rod (slide the rod between the third and fourth bar). See *Figure 22*.



Rotate the grill back to the horizontal position and re-install the four button head screws through the two holes at each end of the grill and into the insert body. See *Figures 23 and 24*.

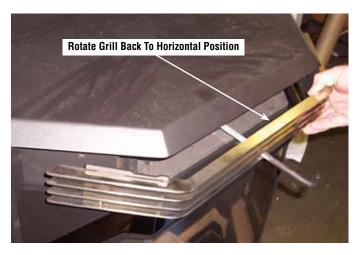


Figure 23



Figure 24

Brick Panel Installation

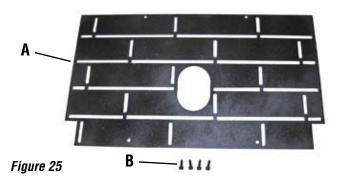
Option: Part #79030

Kit Contents

Brick Panel (A) 4 Tap Tights (B)

Tools Required

Drill (90° drill recommended) #18 drill bit 5/32 allen wrench



Note: The brick panel comes pre-painted with Metallic Black paint. The brick panel may be painted with any color of high-temp paint (paint may discolor with use).

 Remove the front door of the pellet insert. To remove the front door, open the two side panels, swing open the front door, and lift it up and off of its hinges. Remove the optional log set, if present, and the burn pot.



Figure 26

- 2. Remove all pellets and ash from the firebox to ensure a proper fit for the brick panel.
- 3. Insert the brick panel, top first, as shown in *Figure 27*. The two cut out corners should be at the bottom.



Figure 27

4. Make sure that the brick panel is centered, with equal space on either side of the auger tube. While holding the panel in place, use the drill with a #18 drill bit to drill out the four holes in the back of the firebox, as shown in *Figure 28*.



Figure 28

5. Screw in the four tap tights, included with this kit, using a 5/32 allen wrench.



Figure 29

- 6. Replace the burn pot and check that it is firmly in place (if you can rotate the burn pot it is not installed correctly). If present, install the optional log set according to the log set installation instructions (included with your log set).
- 7. Re-hang the door by reversing the instructions in step 1.

Log Set Installation Instructions

Kit Contents (refer to Figure 30)

Cat. No. #H5142

Qty

- (1) left log (B)
- (1) right log (C)
- (1) front log (D)
- (2) log support brackets (E)

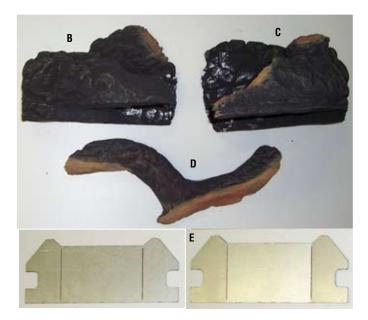


Figure 30

Tools Required

None

CAUTION: The logs can be damaged if they are not handled with care!

To Install the log set:

- Remove the two log support brackets from the box and bend the ends of the brackets 90 degrees at the cut lines. See *Figure 31*.
- One bracket goes into the left corner and the other into the right corner
 of the firebox. Rotate the brackets so they are placed as shown in
 Figure 32. The bracket fits between the back of the firebox and the
 air wash at the front of the insert.
- 3. Remove the ceramic logs from the box and carefully unwrap them. Position each back log (*Figure 33, B, C*) in their proper place, one on each side against the back of the firebox.
- 4. The front log should face the front of the firebox with the wood grain showing. It should rest on the other two back logs. See *Figure 33* for assembled log set.

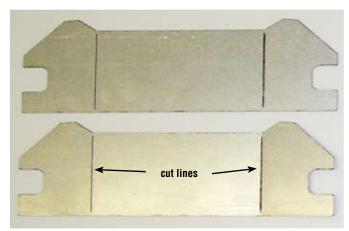


Figure 31



Figure 32

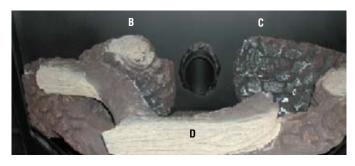


Figure 33

OPERATION

Control Board

The control board regulates all functions of the insert. The following is a list of the board's components:

- Feeding light lights up when the auger is feeding pellets into the burn pot.
- Ready Light lights up when insert is ready to operate.
 Igniting Light lights up when the insert is in the ignition sequence.
- Start Button is pushed to start the ignition sequence after the heat selector knob is turned from off.
 - Heat Selector Knob is turned to off to shut the insert off or turned to a setting from 1 to high to regulate the burn
- Igniter Fuse six amp fuse to protect igniter heating element.
- Control Fuse three amp fuse to protect the control board.

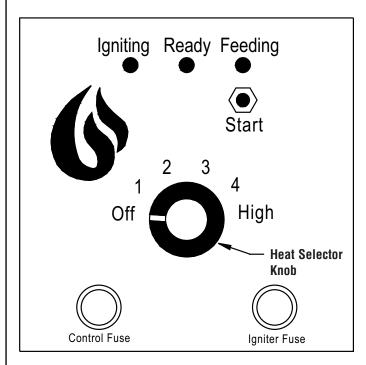


Figure 34

Filling the Hopper

The hopper can be accessed by lifting the lid at the rear of the top of the insert. The hopper will hold 60 pounds of pellets. Remove any contents from the hopper and fill with pellets.

Lighting

1. Turn the heat selector knob (see *Figure 34*) to the heat level desired - 1 through high - and the ready light will turn green.

2. Push the start button and the ignite and feeding lights will come on and the lighting sequence will begin. For about the next 15 minutes the insert will feed pellets cyclically into the burn pot, the combustion fan will come on, and the igniter will heat up. During this sequence, some smoke in the firebox is to be expected. After the igniting sequence is complete, the insert will begin burning at the level indicated by the heat selector knob.

Note: Upon the insert's initial light up, or if the insert has previously run out of pellets, the auger feed tube may not contain a sufficient number of pellets to allow the insert to continue burning after the ignition sequence. It may be necessary to push the start button a second time to run the start sequence again. It is important to always empty (when cool) the burn pot of pellets before pushing the start button a second time.

Λ

WARNINGS

- Never empty pellets from the Burn-Pot into the hopper.
 Pellets that may appear to be cool may retain enough heat to ignite other pellets resulting in smoke or fire damage.
- DO NOT OVERFIRE THIS STOVE. This may cause serious damage to your stove and void your warranty. It also may create a fire hazard in your home. IF ANY EXTERNAL PART OF THE UNIT BEGINS TO GLOW, YOU ARE OVERFIRING. Immediately slide the knob to the "OFF" position on the control board.

Manual Operation

After the insert is burning (see Lighting on this page), the heat selector knob controls the pellet burn rate and the insert's heat output. Turning the knob to setting 1 allows the insert to burn about 1.8 pounds of pellets per hour - about 8,500 BTUs per hour. Turning the knob to high allows the insert to burn 4.7 pounds of pellets per hour - about 39,000 BTUs per hour. Once set, the insert will continue to burn at this rate until shut off.

Thermostat Operation

This insert will operate with a low voltage thermostat. See *Page 12* for instructions on installing the thermostat. Once installed, the thermostat will control the operation of the insert. Important: When connected to a thermostat, it is necessary to push the ignite button for the initial burn, when the electrical flow to the insert is interrupted, if the selector knob is turned to off (and then back on), or if the insert runs out of pellets and therefore shuts off. After the initial ignition sequence, when the thermostat calls for heat (the room temperature is less than the temperature set on the thermostat) and the heat selector knob is not in the off position, the insert will burn at the heat selector knob setting. The higher the setting, the quicker the room will heat up. Once the thermostat no longer calls for heat (the room is up to the desired temperature), the insert will continue to burn for one additional hour at the lowest setting. If the thermostat does not call for heat again during that hour, the insert will shut off. During that hour, if the thermostat calls for heat again, the insert will again burn at the heat selector knob setting until the thermostat no longer calls for heat. If the insert shuts off after that hour it will relight when the thermostat calls for heat.

Shut Down

Normal - To turn the insert off, turn the heat selector knob to off. The fans will continue to operate until the control board completes the shut down cycle.

Power Outage - If the insert loses electrical power for less than 10 seconds it will continue to operate. If the power loss is greater than 10 seconds, the insert will go into the ignition sequence and normal operation when the power is restored. If the insert is connected to a thermostat, the insert will not start the ignition sequence until the thermostat calls for heat.

Paint Curing

This insert has been painted with a high temperature metallic paint. It leaves the factory dry to the touch, but completes the curing process as the insert is used. The paint will cure during the first few times the insert is burned. Also some parts of the appliance may be lightly coated with machining oil. Ventilate the house during these first firings as the paint and oil give off carbon dioxide and unpleasant odors. It is recommended that persons sensitive to an imbalance in the indoor air quality avoid the insert during the curing process.

Convection Blower Operation

Your Winslow™ PI40 insert comes equipped with a temperature activated convection blower that extracts heat from the insert. After the insert warms up, a heat activated switch will turn the fan on. The speed of the fan varies with the burn rate of the insert. The fan will continue to extract heat after the insert shuts off and until it is cooled down.

Operating Sounds

As the Winslow PI40 insert is burning, a number of normal operational sounds may be heard. Pellets can be heard sliding down the auger tube and into the burn pot. Also, the motor powering the auger can be heard as the control board calls for pellets. Occasionally a loud noise can be heard as the auger cuts a pellet in half. When the blowers come on, the sound of rushing air may be heard. The lower the burn rate the slower the fan operates. Hourly, the combustion fan will blow at a high speed to clean ash from the burn pot.

Pellet Fuel

Pellet fuel is made from sawdust and scrap wood from many different species of wood. Pellets are either 1/4" or 5/16" in diameter and vary in length (see *Fuel Specifications* on *Page 5*). The Winslow Pl40 insert will burn either diameter pellets. Pellets made from hardwoods contain more ash than those made from softwoods. Minerals from ash and sand in the pellets form clinkers under the extreme temperatures in the burn pot. Try burning various brands of pellets until you find one that burns with minimum ash and clinkers.

Once you find a pellet brand that burns well, continue using this brand. High ash fuel increases the frequency of insert cleaning. Fuel with an excessive moisture content may jam the auger assembly.

Corn Fuel

Shelled corn can be burned in the Winslow PI40 insert when it is mixed with wood pellet fuel (see *Fuel Specifications* on *Page 5*). The mixture can contain a maximum of 50 percent corn. Burning corn may create more ash than wood pellets and may necessitate the need to clean the burn pot and glass more frequently.

CAUTIONS

INSTALLATION AND REPAIR SHOULD ONLY BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN. DO NOT ATTEMPT TO SERVICE THE APPLIANCE YOURSELF.

Avoid overfiring the insert - do not hand feed pellets to the appliance.

Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or fresh up a fire in this heater. Keep all such liquids well away from the heater while it is in use.

For your safety, do not install or operate your Winslow PI40 insert without first reading and understanding this manual. Any installation or operation of the appliance deviating from that which is stated in this instruction manual WILL void the warranty and may be hazardous.

Due to high temperatures, the insert should be located out of traffic areas and away from furniture and draperies. Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the Winslow PI40 insert. Clothing or any other flammable material should not be placed on or near the insert. Any grill, panel, or glass removed for service MUST be replaced prior to operating the insert.

Do not operate appliance with the glass front removed, cracked, or broken. Replacement of the glass should be done by a qualified service technician.

Lennox Hearth Products, its employees, or any of its representatives assume no responsibility for any damages caused by an inoperable, inadequate, or unsafe condition as a result of any improper operation, service, or installation procedures, whether direct or indirect.

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-latest edition.

CLEANING AND MAINTENANCE

Unplug and let the Winslow™ PI40 insert cool before performing any maintenance or cleaning. Some brands of pellets produce more ash and clinkers than others. Therefore the frequency of performing the following cleaning procedures depends to a great degree on the quality of the pellets burned. Not cleaning this unit will cause it to burn poorly and will void your insert's warranty.

Burn Pot Cleaning

The combustion fan comes on at high speed once an hour to blow the byproducts of combustion out of the burn pot. However, the burn pot should be cleaned more thoroughly after burning about 10 bags of pellets. The burn pot has a number of holes in the bottom and sides that provide combustion air to the pellets. The extreme temperatures in the burn pot can cause the impurities in the pellets to form ash and clinkers. When the insert is cool, open the front door and lift out the cast iron burn pot. Scrape the inner bottom and sides of the pot with a screwdriver to remove all ash and clinkers from these surfaces. Make sure all the holes in the pot are open. Place the burn pot in the hole from which it was removed. Make sure the high side of the pot is rotated toward the front of the insert (see *Figure 35*). Push the burn pot down so surface A is tight against the steel supporting the pot. Do not substitute any other grate or pot for use in this insert.

Cleaning Glass

CAUTION: Do not open the front door when the fireplace insert is hot. To open the door, follow the first two steps listed in Front Door Removal on *Page 23*. Clean the glass using a soft cloth or paper towel and a household glass cleaner or gas stove window cleaner. A damp cloth with a small amount of ash from the firebox can also be used to clean the glass.

Cleaning the Heat Exchanger

CAUTION: Do not operate the heat exchange scraper when the insert is hot. Located at the center of the Grill on the top front of the insert is a bent rod that is attached to a scraper on the heat exchange tubes. To remove ash build-up and maintain efficient heat extraction from the insert, this rod should be pulled in and out at least weekly.

Cleaning the Flue Gas Passageways

Cleaning the flue gas passageways should be done at least once a year. Burning high ash pellets may require this cleaning to be done more often. Clean these passageways only when the insert and ash are cold, do not start a fire in the vacuum cleaner by vacuuming up hot ash.

On each side of the insert there are two access covers (see B and C in *Figure 36*) that can be removed by unscrewing the two 5/32" allen head screws. Insert a cleaning brush in the openings to loosen any ash build-up and use a vacuum cleaner to remove the loosened ash. Reinstall the covers when cleaning is complete.

Reinstall the ash drawer by inserting the drawer in the insert and refastening the left and right latches securely. Note that if the ash drawer does not seal tightly to the insert, the control board may detect a leak and shut the insert down.

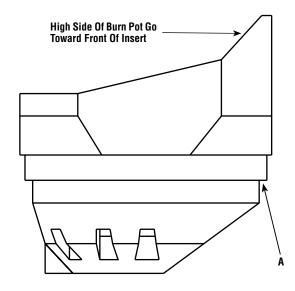


Figure 35

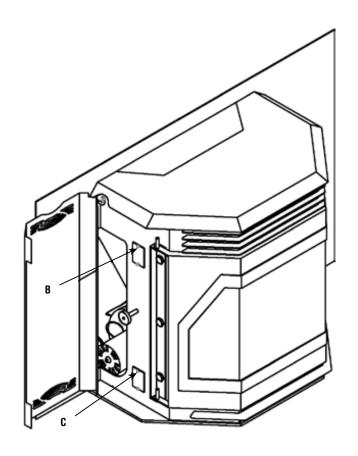


Figure 36

Cleaning the Combustion Blower

To clean the combustion blower, unplug the insert from the power source and remove the six nuts labeled A in the drawing to the right with an 11/32" wrench. After removing these nuts, the motor with fan attached can be pulled from the fan housing. The fan blades and the fan housing can be vacuumed once the motor is removed. When reinstalling the motor, a new gasket may need to be installed between the motor and the fan housing. To complete the reinstallation, place the motor back on the fan housing and reinstall the six nuts. Make sure the motor's green ground wire is secured under one of the nuts.

Cleaning the Vent Pipe

Soot and Flyash: Formation and Need for Removal

The products of combustion will contain small particles of flyash. The flyash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion, such as occurs during start-up, shutdown, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary. Sweep the pipe as needed.

The insert has a clean-out box to which the flue pipe or flex pipe is attached. To access the clean-out box, remove the right side surround panel and right door. *Figure 37* shows the box in the upright position attached to the flue fan. *Figure 38* shows the box from the bottom, revealing the latch securing the box door. Pull the latch down to open the box. When the ash is cold, use a vacuum cleaner to remove the ash from the box. Refasten the box door by rotating the latch handle up.

Required Cleaning Schedule After Number Of Bags Burned:

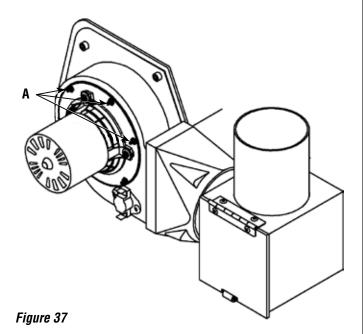
Burn Pot = 10 bags Ash Drawer = 50 bags Traps = 50 bags Flue Fan = 100 bags Blower = 100 bags

Note: Cleaning schedule will vary depending on quality of pellets used. Burning high ash pellets will require more frequent cleaning.

Removing the Ash from the Firebox

CAUTION: Do not remove the ash when the insert or ash is hot. To remove the ash, swing open the left and right side doors and open the front door. Vacuum or scoop out the ash on the bottom and side of the firebox.

CAUTION: Disposal of ashes should be placed in a metal container with a tight fitting lid. The closed container should be placed on a non-combustible floor or the ground, well away from all combustibles materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.



Rotate Latch Handle

Figure 38

Cleaning the Convection Blower

To clean the convection blower, remove the left side door (see the following page). Disconnect the insert power cord from the electrical outlet. Loosen the two screws (A in *Figure 39*) securing the blower to the blower duct. Slide the blower toward the outside of the insert - disengaging it from the blower duct. A vacuum can be used to remove any dust accumulation on the blower's blades or inside the blower duct. Caution should be used not to damage the blower's blades during cleaning. To reinstall the blower, slide the blower back into the retaining lip B and retighten screws A.

Adjustable Hopper

The Winslow™ P140 insert is shipped with the 55 pound hopper. With the larger hopper installed, that part of the insert that slides into the fireplace is 22-1/2" (572 mm) high. For installations in smaller fireboxes, the hopper is adjustable down to a height of 19" (483 mm). To adjust the hopper to its lowest height of 19" (483 mm), remove screws C around the hopper lid and lift the lid off. Next, remove the screws D around the hopper extension and remove the extension. Place the lid back over the hopper and reinstall the screws securing the lid.

To adjust the hopper height between the maximum and the minimum, remove screws D and slide the hopper extension (with lid attached) down around the hopper bottom to the height desired. The extension can be lowered at most 2-1/2" (64 mm). Reinstall the self-tapping screws through the holes in the extension (creating new holes in the hopper bottom).

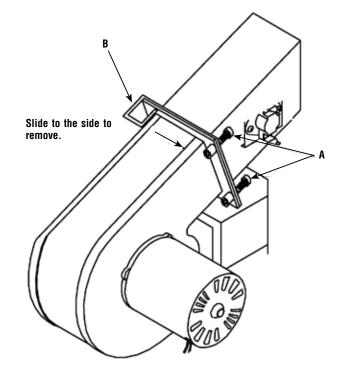


Figure 39

Proof of Fire Switch

This switch needs to be removed and cleaned after every 100 bags of fuel burned.

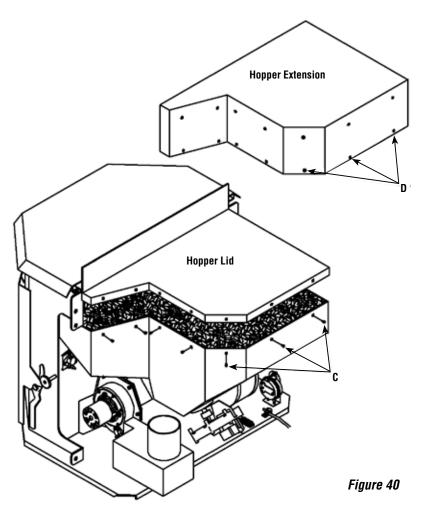
Cleaning Procedure:

1. UNPLUG STOVE!

- Locate the switch on the combustion blower (see Figure 43).
- Using a flat-head screwdriver, remove the 2 screws which secures the switch to the blower housing.
- 4. Using a dry cloth, wipe off any flyash build-up on the sensor portion of the switch.
- 5. Reinstall switch. Ensure wires are properly connected to the switch and the connectors are not making contact with the blower housing. Close side panel.

Note: Failure to clean the proof of fire switch when needed may result in nuisance shut-downs because the fly-ash build-up insulates heat from reaching the switch.

(Recommended Frequency of 1 year or after every 100 bags of fuel used)



Front Door Opening and Removal

CAUTION: Do not open the front door when the insert is hot.

To remove the door, swing the left and right side doors A open. Pull the front door handle B to the front and swing the front door open. Lift the front door up and off the hinges as shown in *Figure 41* (see C). To reinstall the door repeat the steps in reverse order.

Side Door Removal

To remove the door,

- 1. Swing the door open
- 2. Lift the door up, and
- 3. Pull the bottom of the door out and down pulling the top hinge pin out of the retaining hole in the top hinge bracket.

To reinstall the door, slide the pin on the top of the door up and into the hole in the upper hinge bracket. Slide the pin on the bottom of the door into the hole in the pedestal base and rotate the door closed.

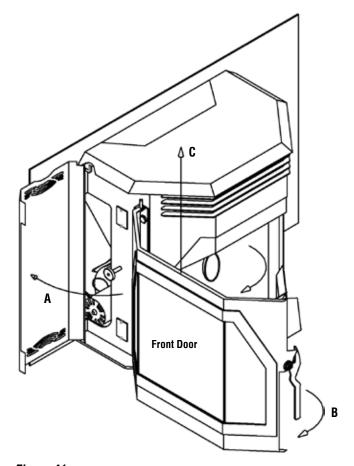
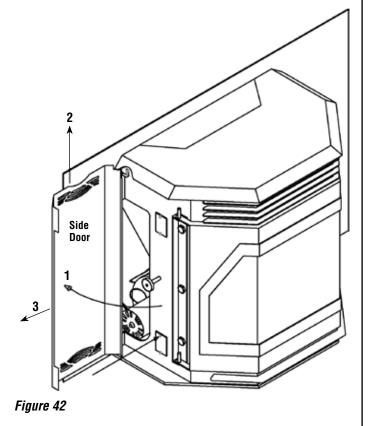


Figure 41



22

COMPONENT INFORMATION

The following is a list of components and their functions.

Igniter

The Winslow™ PI40 insert comes equipped with an automatic igniter for lighting the fuel when the insert is in the lighting mode. The igniter superheats air that is pulled through the burn pot by the combustion blower to light the fuel. The igniter remains energized for the first seven minutes of the lighting sequence.

Vacuum Switch

The Winslow PI40 insert has a vacuum switch located behind the left door, fastened to the base (see A in Figure 44). If there is a leak in the firebox created by the front door being ajar or a blocked flue, the vacuum switch will sense it and cause the insert to go into a shutdown mode.

Auger and Auger Motor

The 1.25 RPM auger motor (B in *Figure 22*) turns the auger lifting pellets up the auger tube. The pellets are then dropped down a tube and into the firepot. The auger is controlled by the control board.

Over Temperature Snap Switch

(Opens at 225F) This switch is installed on the convection blower (see C in Figure 44) and shuts the insert down if it senses excessive temperatures. This snap switch has a reset button on it and will not allow the insert to start up until the reset button has been pushed.

Proof of Fire Snap Switch

(Closes at 140° F) This switch is installed on the combustion blower and shuts the insert down if it does not detect fire in the burn pot.

Convection Blower Snap Switch

(Closes at 120° F) This switch is installed on the right rear of the firebox and turns the convection blower on when the insert gets up to temperature.

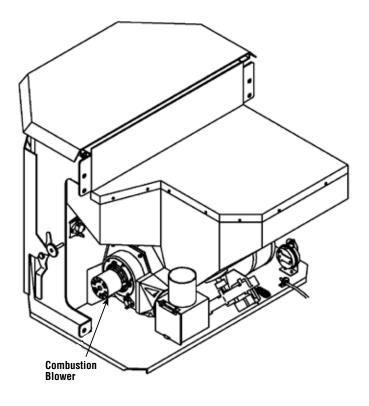


Figure 43

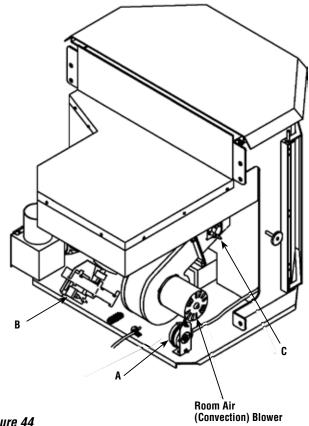


Figure 44

Draft Adjuster

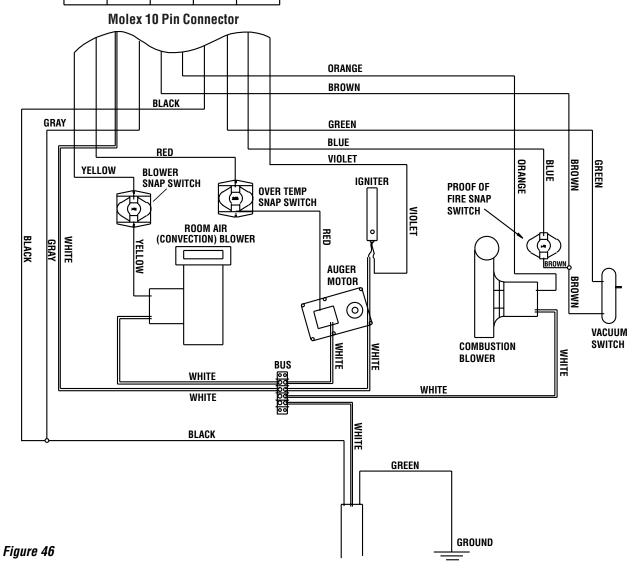
The Winslow™ PI40 insert has a draft adjuster located at the right side of the insert directly in front of the combustion blower. Should the insert installation require long runs of vent pipe, a situation may be created where excessive combustion air is flowing through the firebox and causing the fuel to burn faster than it can be delivered to the burn pot. Should this happen, the draft can be slowed down by the adjuster. The insert is shipped with the adjuster in the fully open position. To slow the draft down, loosen the 5/32" allen head screw (A in *Figure 45*) and move the adjuster handle toward the center of the insert. Retighten the screw when the desired adjustment is reached.

Draft Adjuster

Wiring Diagram

10 9 8 7 6 WHT **GRY** YEL **RED BRWN** 5 3 2 1 4 **BLU** VIOL ORNG BLK GRN

Figure 45



25

DIAGNOSTIC CODES

If the insert operates abnormally, the ready light on the control board will signal the nature of the abnormal operation. The following is a list of possible signals or codes:

Ready light is constant red Ready light flashes red 1 short and 1 long blink Ready light flashes red 2 short blinks Ready light flashes red 2 long blinks Ignition Failure Vacuum Switch Open Proof of Fire Snap Switch Open Over Temperature Snap Switch Open

Troubleshooting

Ignition Failure - Code - Ready light is constant red and ignite light flashes two short blinks		
Possible Problem	Solution	
Hopper is out of pellets	Fill the hopper with pellets	
Auger tube was not full of pellets when start button was pushed	When cool, empty pellets in burn pot and push start button again	
Burn pot dirty - holes plugged	Clean the burn pot	
Igniter not functioning	Replace the igniter	
Igniter fuse blown	Replace 6 amp fuse located on front of the control board	

Control Board has no Power - When selector knob is turned no lights light up		
Possible Problem	Solution	
Power cord is not plugged in	Plug in power cord	
Board fuse blown	Replace 3 amp fuse located on front of control board	
Wall outlet not energized	Check circuit breaker panel	
Board broken, damaged, or defective	Replace the control board	

Vacuum Switch Shuts Insert Down - Code - Ready light flashes red 1 short and 1 long blink		
Possible Problem	Solution	
Front door is not sealing	Latch or adjust the front door or replace door gasket	
Ash drawer is not sealing	Close latches, adjust latches, or replace drawer gaskets	
Flue gas passageways restricted	Clean the passageways (see <i>Page 20</i>)	
Vent pipe restricted	Clean the vent pipe (see <i>Page 21</i>)	
Vacuum hose plugged	Clean or replace the vacuum hose	
Vacuum switch defective	Replace the vacuum switch	

Proof of Fire Snap Switch Shuts Insert Down - Code - Ready light flashes red 2 short blinks		
Possible Problem	Solution	
Hopper is out of pellets	Fill the hopper with pellets	
Auger tube was not full of pellets when start button was pushed	When cool, empty pellets in burn pot and push start button again	
Snap switch* defective	Replace the snap switch	
"Proof of fire" switch is dirty	Clean switch per instructions on <i>Page 22</i>	

Over Temperature Snap Switch Shuts Insert Down - Code - Ready light flashes red 2 long blinks		
Possible Problem	Solution	
Convection blower not running	Blower dirty, blower snap switch bad, or blower broken	
Flue passageways or vent restricted	Clean passageways or vent pipe (see <i>Pages 20 and 21</i>)	
Snap switch* defective	Replace the snap switch*	
* Note: The snap switch has a reset button that must be pushed before insert will function (see Page 24).		

Orange Sooty Flames - Glass turns Black		
Possible Problem	Solution	
Burn pot is dirty	Clean the burn pot	
Vent pipe restricted	Clean the vent pipe	
Flue gas passageways restricted	Clean the passageways	
Combustion blower dirty	Clean the combustion blower	
Burning improper fuel	Burn only wood pellet fuel or corn fuel that meets the fuel specifications outlined on <i>Page 5</i>	

Pellets not Feeding		
Possible Problem	Solution	
Hopper empty	Fill the hopper	
Auger jammed	Call service technician	
Flue gas passageways restricted	Call service technician	
Auger motor not operating	Call service technician	

REPLACEMENT PARTS

Contact an Authorized Lennox Hearth Products dealer to obtain any of these parts. Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

Winslow™ PI40 insert		H5984	Decorative Nickel Bars / Upper Body
		H3112	Door Handle Assembly
Cat. No. <u>Description</u>		79040	Door w/glass (No Trim)
H6006	Adjustable Latch Pin	H6021	Flue Clean Out Box
H3111	Ash Clean Out Cover, 2 Per Insert	H5988	Hardware Package
H5886	Auger Motor	H5911	Hopper Door Wire
H5921	Auger w/lower Bearing	79021	Igniter Fuse 6 Amp, 5 Pack
H5875	Blower Snap Switch	H6005	Igniter W/hose Clamp
H5856 Cast Burn Pot H5891 Overtemp Switch		Overtemp Switch	
H5899 Clean-out Cover Gasket H6004 Power Cord		Power Cord	
H6019	Combustion Blower	H5887	Proof Of Fire Switch
H5900	Combustion Gasket Housing To Insert	H3128	Right Flange W/controls Access Door 40"
H5903	Combustion Gasket Motor To Housing	H6020	Right Flange W/controls Access Door 48"
H5917	Control Board Access Latch	H5898	Vacuum Line 12" Piece
H5978	Control Board	H5889	Vacuum Switch
79020	Control Board Fuse 3 Amp, 5 Pack	H5976	Wiring Harness
H5888	Convection Blower	70K99	Touch-Up Paint, Black
H5902	Convection Blower Gasket		

ACCESSORIES

Surround Panel Kits (required - sold separately)		
Cat. No.	Model	Description
79004	PI40-FPK2941	29" Ht. x 41" Wd. Black Trim
79005	PI40-FPK2948	29" Ht. x 48" Wd. Black Trim
79006	PI40-FPK3341	33" Ht. x 41" Wd. Black Trim
79007	PI40-FPK3348	33" Ht. x 48" Wd. Black Trim
H7232	PI40-32ZCFK	29" Ht. x 41" Wd. 3" Deep *

^{*}The three inch deep surround assembly positions the Winslow™ pellet insert three inches forward onto the hearth which allows the insert to fit into a fireplace with a narrower front width (32" minimum). Using the other standard surround sizes require a minimum front fireplace width of 36".

Door Trim (required - sold separately)		
79038	P40DT-B	Black
79034	P40DT-G	Gold
79037	P40DT-N	Nickel
79035	P40DT-BRN	Brushed Nickel
79036	P40DT-BLN	Black Nickel

Grill Finish		
79000	P40G-B	Black
79001	P40G-G	Gold
79002	P40G-N	Nickel
79022	P40G-BN	Brushed Nickel
79039	P40G-BLN	Black Nickel

Surround Trim		
H5143	GFT2941-B	Trim/Black 29" Ht. x 41" Wd.
H5145	GFT2948-B	Trim/Black 29" Ht. x 48" Wd.
H5144	GFT3341-B	Trim/Black 33" Ht. x 41" Wd.
H5146	GFT3348-B	Trim/Black 33" Ht. x 48" Wd.
75036	GFT2941-G	Trim/Gold 29" Ht. x 41" Wd.
75038	GFT2948-G	Trim/Gold 29" Ht. x 48" Wd.
75040	GFT3341-G	Trim/Gold 33" Ht. x 41" Wd.
75042	GFT3348-G	Trim/Gold 33" Ht. x 48" Wd.
75037	GFT2941-N	Trim/Nickel 29" Ht. x 41" Wd.
75039	GFT2948-N	Trim/Nickel 29" Ht. x 48" Wd.
75041	GFT3341-N	Trim/Nickel 33" Ht. x 41" Wd.
75043	GFT3348-N	Trim/Nickel 33" Ht. x 48" Wd.

Zero Clearance Kit		
Cat. No.	Model	Description
79025	PI40-ZCK	Zero Clearance Kit

Pellet Heat Kits		
79024	PI40-HK	Pellet Heat Kit
79026	PI40-HK30411	30-5/8" Ht. x 41" Wd. Surround Panels
79027	P140-HK3048F	30-5/8" Ht. x 48" Wd. Surround Panels
79028	PI40-HK3441F41	34-5/8" Ht. x 41" Wd. Surround Panels
79029	PI40-HK3448F	34-5/8" Ht. x 48" Wd. Surround Panels
75251	GFHKET-B	Extended Side Trim Kit, Black
75062	GFHKET-G	ZC Front Support Extension Trim, Gold
75063	GFHKET-N	ZC Front Support Extension Trim, Nickel

	Common Accessories		
79003	PI40FS	Front Support 41-48" Width/0-8" Height	
H5142	P40L0G	Log Set	
79030	P40BRICK	Standard Brick Panel	
H6907	P40DIAG40	Diagnostic Tool	
70005	RT-AC	Remote Control w/Thermostat, Alternating Current	
H0251	RCL-STAT	Deluxe Remote Control (Timer, Thermostat, Clock)	
H4635	DWTK	Digital Wall Thermostat Kit	
70K99	TSPK-B	Touch-up Spray Paint Kit, Black	

Heat Kit Instructions

Kit Contents (Refer to Figure 47)

1 ea. 2" lower trim piece (A) 1 ea. 1" insulated micro board (B) 2 ea. 1/2" x 10-24" screws (C)

Tools Required

5/32 allen wrench

- Install the 2" lower trim piece. Fasten the 2" trim piece underneath
 the base of the front of the insert using the 2 screws (see C in *Figure*47) provided, one at the left side and one at the right side base of the
 insert. *Note:* This process will be simplified by very cautiously tilting
 the insert back (see *Figure* 48).
- 2. Install your 4 leveling bolts. Open the main front door and remove the 2 bolts in the front right and front left of the bottom of the fire box see *Figure 49. Note:* Placing a level on the insert top is recommended to ensure your insert is level. Again with the insert very cautiously tilted back insert your 4 leveling bolts approximately 2-1/16" (52 mm) into the holes provided at the bottom of the insert (see *Figure 50*).
- 3. Set insert on micro board. Now that the insert is level, place your micro board in place where the insert will be installed and set the Winslow Pl40 insert over the micro board so the 2 front leveling legs line up with the two cut-outs in the front of the micro board see *Figure 51*. Your Winslow Pl40 insert heat kit is now installed.

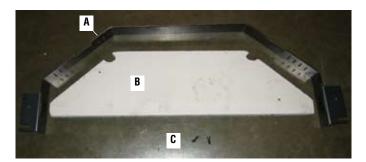


Figure 47



Figure 48



Figure 49



Figure 50



Figure 51

Pellet Insert ZC Kit Assembly

Kit Contents (refer to Figure 52)

1 ea. Back panel (A)

1 ea. Left side panel (B)

1 ea. Right side panel (C)

1 ea. Top panel (D)

1 ea. Access panel (E)

1 ea. Flue block off plate (F)

6 ea. Standoff brackets (G)

2 ea. Rubber grommets (H)

26 ea. 1/8 x 1/2 inch screws (I)

4 ea. Door washers (J)

1 ea. Rear vent adapter (K)

Tools Required

1/4" Nut Driver, 1/8" Drill

Installation Instructions

Note: Top or rear vent? If you will be venting out the top then you will install the block off plate F onto the lower back panel A in the spot that is marked R in *Figure 52*. If you are venting out the back you will install the block off plate F onto the top panel D in the spot that is marked T in *Figure 52*. You will use four of the sheet metal screws provided to attach the block off plate, part F.

 In a rear vent termination you will have to remove the three screws (one on top and one on each the right and left side) that hold on the flue clean out box and replace it with the adapter (shown in *Figure 53*).
 Make sure the flat edge is directed towards the inside of the insert. (*Figure 54*).

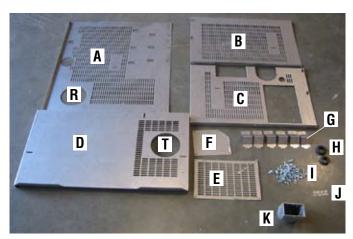


Figure 52



Figure 53

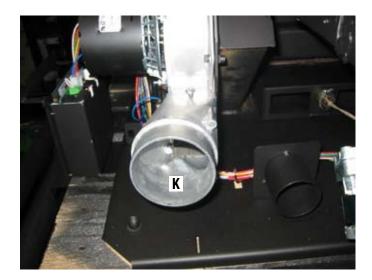


Figure 54

2. Assembling the perimeter - *Figure 55*: Using the sheet metal screws provided, attach the left side panel B and the right side panel C to the back panel A. There are 3 holes at each corner to connect the panels, at this point only install the lower two screws at each corner.



Figure 55

3. Install the top panel D. Place panel D on top of panels A, B, and C as shown in *Figure 56*. There are 3 holes across the top of the panel on each side. Insert the screws only on the right and left side. The 3 remaining holes in panel D will be used in step five.



Figure 56

4. Installing the standoffs, parts G. There are 3 standoffs on the top panel D (see *Figure 57*). Insert them by taking the lip of the standoff and sliding them into the slots then push down. Using a sheet metal screw provided screw them into the hole provided. There is also one standoff on each the right, left and the back panel. Showing standoff on left panel C in *Figure 58*.



Figure 57

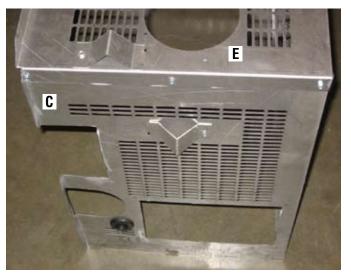


Figure 58

5. Now remove the 3 screws located across the top of the pellet hopper. (See *Figure 59*). At this time set the assembled ZC box near the back of the insert and take the power cord located in the lower rear of the insert and pull it through the rubber grommet located at the bottom of the back panel A. Then on the right panel C, pull the wiring harness through the rubber grommet located towards the bottom *Figure 60*. Slide the ZC box snug up against the back of the insert and reinstall the 3 screws previously removed through the ZC box and into the insert (three holes shown in *Figure 59*).



Figure 59



Figure 60

6. Installing access panel: Taking the access panel (E in *Figure 61*) and 4 of the sheet metal screws provided, screw the access panel E onto the right side panel C as shown in *Figure 61*).



Figure 61

7. Final step: Using the four oblong washers and 4 sheet metal screws, insert two on each lower side of your ZC box shown in *Figure 62*. You are now ready to install your pellet insert. Follow all vent clearances stated in the installation and operation manual.

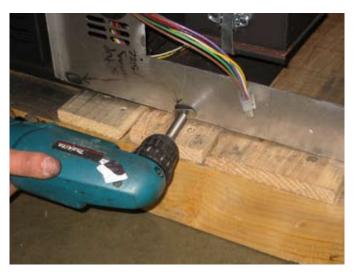


Figure 62

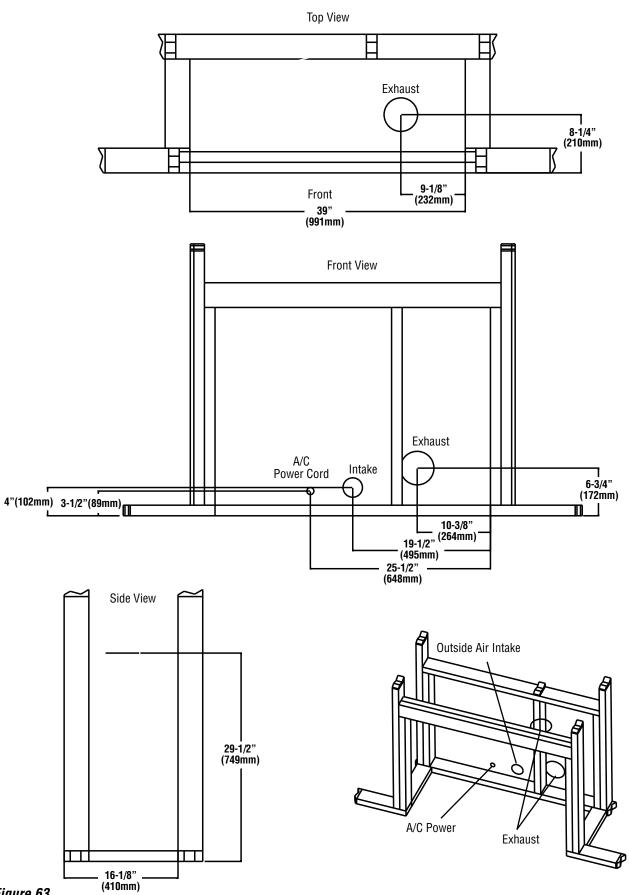


Figure 63

ZC Framing Dimensions for Non-Combustible Hearth /Floor

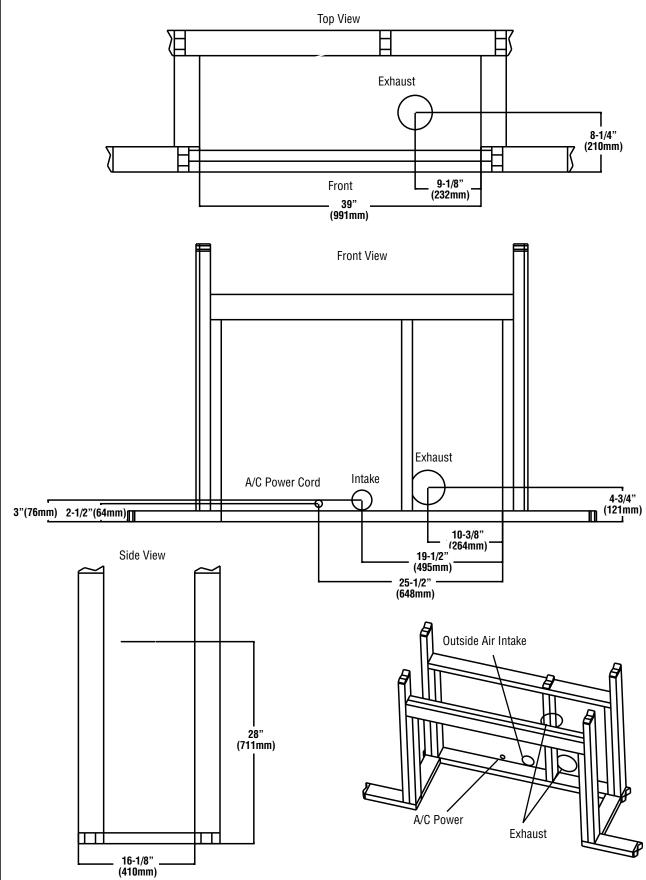


Figure 64

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

NOTES

WARRANTY

Your pellet insert is covered by a limited warranty (provided with appliance). Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

PRODUCT REFERENCE INFORMATION

We recommend that you record the following important information about your fireplace. Please contact your Lennox Hearth Products dealer for any questions or concerns. For the number of your nearest Lennox Hearth Products dealer, please call 1-800-9-LENNOX.

REPLACEMENT PARTS

See Page 27 for a complete replacement parts list. Use only parts supplied from the manufacturer.

Normally, all parts should be ordered through your Lennox Hearth Products distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

- 1. The model number of the appliance.
- 2. The serial number of the appliance.
- 3. The Cat. No..
- 4. The description of the part.
- 5. The quantity required.
- **6.** The installation date of the appliance.

If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer.

LENNOX HEARTH PRODUCTS 1110 West Taft Avenue Orange, CA 92865 Visit us at www.Lennox.com

ı	
	Your Insert's Model Number
	Your Insert's Serial Number
	The Date On Which Your Insert Was Installed
	Your Dealer's Name
	Your Dealer's Phone Number
ı	



We recommend that our pellet hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Pellet Specialists or who are certified in Canada by Wood Energy Technical Training Wood Energy Technical



Nous recommandons que nos pôeles à boulettes soient installés et que l'entretien soit effectué par des professionnels certifiés, aux Etats-Unis par le National Fireplace Institute® (NFI), et au Canada par le Wood Energy **Wood Energy** Technical Training Technical Training

(WETT).

Lennox Hearth Products reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

